

The final rejection of May 26, 2010 has been withdrawn in order for applicant to respond to the following new grounds of rejection. Prosecution of this application continues.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki (JP-1996-08266211 translation) as further evidenced by Swern and "Turning the Heat Up on Crisco (and Lard)" and in view of Ratka (6,919,098) taken with Johnson.

Kawasaki discloses a bread quality improver comprising edible oil, emulsifiers and protein powder (paragraph 6). Exemplary compositions are disclosed containing 59-74% rapeseed salad oil, which possesses the fatty acid composition required (as evidenced by Swern at page 416), about 26% of lecithin and glycerol fatty acid ester as emulsifiers, and about 6-10% of a humectant protein (Table 1). The ratio of oil (A) to emulsifier (B) in these examples is about 2.25-2.8.

Regarding claim 5, Kawasaki discloses the fat and oil composition of claim 1, but does not disclose the degree of penetration for the composition. However, one having ordinary skill in the art would expect the fat and oil composition of Kawasaki, having the formulation as claimed, to possess the same physical properties, including the degree of penetration.

Regarding claim 7, Kawasaki discloses producing Pullman bread comprising per 100 parts flour, 2 parts of the bread quality improver as in claim 1, and 5 parts of shortening (fat) (paragraph 21). As evidenced by 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range.

Regarding claim 10, Kawasaki discloses bread of claim 7, but does not disclose the stress measurements of the bread. However, one having ordinary skill in the art would expect the bread of Kawasaki, having the formulation as claimed, to possess the same physical properties, including the stress of the bread upon compression. The bread prepared using the fat composition (paragraph 22) and is further sliced in paragraph 23, as required in claims 11, 27 and 28.

Regarding claims 12, 15, 16, Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of the bread quality improver as in

claim 1, and 5 parts of shortening (paragraph 21). As seen in 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range. Kawasaki discloses the use of the bread improver in breads comprising about 5 parts sugar per 100 parts of flour. The breads disclosed in Kawasaki are Pullman type breads, which are generally known in the art to be relatively non-sweet, sandwich loaves. However, it is well known in the art to produce sweet-breads comprising higher levels of sugar and shortening, and it would have been obvious to one having ordinary skill in the art at the time of the invention to produce a sweetened bread using the bread improver of Kawasaki, as the incorporation of the quality improver in breads allows preservation of the breads flavor and texture, even after multiple days of storage (paragraph 22). Although Kawasaki does not disclose the stress of the bread upon 50% compression after 3 days storage at 20 C in N₂, one having ordinary skill in the art would expect a sweetened bread produced using the bread improver of Kawasaki, having the formulation as claimed, to possess the same physical properties, including the stress of the bread upon compression.

Regarding claims 17, 19, Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of bread quality improver as in claim

1, 5 parts of sugar, and 5 parts of shortening (paragraph 21). As evidenced by 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range. Although the level of shortening present in the types of bread produced by Kawasaki is lower than claimed, it is well known in the baking art to produce brioche-type breads, which are enriched by high levels of shortening. As the bread improver of Kawasaki allows preservation of the breads flavor and texture, even after multiple days of storage (paragraph 22), it would have been obvious to one having ordinary skill in the art at the time of the invention to include the bread improver in highly shortened bread, such as brioche. Regarding claims 24 and 26, brioche is known within the art as a cake-type product and would be expected to have the claimed properties.

Regarding claims 20-22 Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of the bread quality improver as in claim 1, 5 parts of sugar, and 2.2 parts yeast (paragraph 21). Kawasaki discloses immediate baking of the bread. However, within the baking art, it is well known to freeze finished dough in order to provide a bakery product that can be freshly baked by the consumer. The level of yeast

disclosed in Kawasaki is slightly lower than the claimed 3 parts yeast; however, one having ordinary skill in the bread-baking art at the time of the invention would find it obvious to adjust the quantity of yeast used in order adjust the texture and rise of the bread as a matter of routine skill in the art.

The claims appear to differ from Kawasaki as further evidenced by Swern and Crisco in the recitation of the use of the specific emulsifier composition having 80% glycerin fatty monoester and propylene glycol fatty monoester.

Johnson teaches emulsifiers for foods. The emulsifiers mentioned are mono- and diglycerides and lecithin as the most popular emulsifiers for foods, including bakery products. Propylene glycol esters are a suggested low cost alternative emulsifier at column 2, on page 368. Propylene glycol esters are also disclosed to permit the use of lower levels of shortening in foods.

Ratka teaches scoopable dough as a way to prepare biscuits, dumplings, bread, coffee cake and the like. The scoopable dough includes the ingredients needed to prepare the dough (abstract). These ingredients include flour, a protein supplement, shortening, humectant and a leavening

ingredient (claim 1). Emulsifiers are disclosed at column 9, lines 27-39 to influence texture and the homogeneity of the dough and also to improve the eating quality of a baked product. Emulsifiers contemplated include lecithin, monoglyceride and diglycerides, propylene glycol monoesters as well as other emulsifiers. The composition is prepared by combining the solid components together and then blending in the liquid components. The solid components would be expected to include shortening and emulsifiers.

Both Johnson and Ratka are relied upon to show that it is known in the art to use propylene glycol monoesters as an alternative to lecithin and monoglycerides in foods. It would have been obvious to one of ordinary skill in the art to include the propylene glycol monoester of Johnson and Ratka in the fat composition of Kawaski as a substitute for lecithin in order to lower the cost of the fat composition and also to control the extent of fat needed to provide a good tasting bakery product. It is appreciated that the ratio of glycerin fatty acid monoester to propylene glycol monoester is not mentioned but one would be expected to adjust the ratio of one emulsifier over the other according to the extent of cost savings desired.

It is appreciated that Kawaski does not mentioned thickening polysaccharides as humectants. Ratka teaches that hydrocolloids, such as

Xanthan gum, guar gum and locust bean gum are useful to increase the moisture content of the dough. It would have been obvious to include the hydrocolloids of Ratka in Kawaski for this reason.

The declaration filed September 27 has been considered but is not persuasive. First, the declaration is confusing and appears to be an omitted page from the specification. The declaration is incomplete because it does not describe what was done, what the symbols refer to in the Table or what the products were. Assuming arguendo that the product is white baked bread, the claims are not commensurate in scope with the declaration because the claims are directed to a fat composition for a bakery product.

Claims 24-26, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (3,622,345) as further evidenced by Ratka (6,919,098).

Gupta discloses shortening composition with oil, glycerol monoester and propylene glycol monoester in the amounts of the claims (column 5, lines 60-70). The shortening is used to prepare cakes (column 7, lines 30-73). The claims appear to differ from Gupta in the recitation of a humectant. Ratka teaches that sugar or sucrose is a humectant (column 7, line 24-45). Sugar is also well known in the art as a sweetener. It would

have been obvious to one of ordinary skill in the art to expect some of the sugar in Gupta to also act as humectant in the cake of Gupta. It is appreciated that the water content of the cake is not mentioned but the baking in Gupta would be expect to lower the level of water to the desired level of the claims.

It is appreciated that Gupta does not mentioned thickening polysaccharides as humectants. Ratka teaches that hydrocolloids, such as Xanthan gum, guar gum and locust bean gum are useful to increase the moisture content of the dough. It would have been obvious to include the hydrocolloids of Ratka in Gupta for this reason.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art further shows the state of the art relating to shortening compositions with emulsifiers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached by dialing 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Carolyn Paden/

Primary Examiner 1781

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